

Claims

1. A sliding device for railway switches having a fixed stock rail and at least a point able to move, on command, between an active position, in which it is close to the stock rail, and an inactive position, in which it is distanced from stock rail, said sliding device (1) comprising

5 a support structure (2) having a central body (3), able to be coupled to an upper portion of a sliding bearing mounted above a sleeper of a track, and two lateral flanks (4) connected to said central body (3);

10 at least two rotary sliding elements (6) able to support said point in said inactive position and mounted one on each of said lateral flanks (4); and

means (7) for fastening said support structure (2) to said sliding bearing;

15 characterised in that said lateral flanks (4) have at least a first part (8) fastened to the central body (3) and at least a second movable part (9) associated to the first part (8) and adjustable vertically relative to said first part (8) to adapt the position of the sliding elements (6) to the operating conditions.

20 2. A sliding device for railway switches as claimed in claim 1 characterised in that the second movable part (9) of the flanks is removably fastened to the first fixed part (8).

25 3. A sliding device for railway switches as claimed in claim 2 characterised in that said movable part (9) is connected to the fixed part (8) by means of one or more fastening screws (10).

4. A sliding device for railway switches as claimed in claim 1, 2 or 3 characterised in that the second movable part (9) of the flanks is adjustable in continuous fashion relative to the fixed part (8).

30 5. A sliding device for railway switches as claimed in claim 1, 2 or 3 characterised in that the second movable part (9) of the flanks is adjustable in discrete fashion relative to the fixed part (8).

6. A sliding device for railway switches as claimed in claim 5 characterised in that the first part (8) and the second part (9) of the lateral flanks (4) respectively have a first and a second coupling surface (13), (14) at least in part shaped complementarily to each other, each of which has indentations (15) for coupling with the other part.

5 7. A sliding device for railway switches as claimed in any of the previous claims characterised in that at least the movable part (9) and/or the fixed part (8) of each lateral flank (4) has a substantially horizontal appendage (16), able in use to be coupled with the lower part of the stock rail, and 10 inferiorly having a profile (17) for coupling to said stock rail, and in that it further comprises means (17) for adjusting the position of said mobile part (9) associated to said appendage (16) and active in correspondence with said coupling profile (17).

15 8. A sliding device for railway switches as claimed in claim 7 characterised in that said adjustment means (17) comprise a through screw (18) with mainly vertical development, inserted through said appendage (16) and thrusting, in use, against the lower part of the stock rail.

9. A sliding device for railway switches as claimed in claim 8 characterised in that it further comprises means (19) for locking said through screw (18) for selectively enabling and inhibiting its adjustment.

20 10. A sliding device for railway switches as claimed in any of the previous claims characterised in that it comprises a plurality of rotary sliding elements (6) associated with the movable parts (9) of each lateral flank (4).

25 11. A sliding device for railway switches as claimed in any of the previous claims characterised in that each rotary sliding element (6) is constituted by an idle roller (6).

12. A sliding device for railway switches as claimed in claim 11 characterised in that each idle roller (6) has a hump shaped lateral

surface (21).

13. A sliding device for railway switches as claimed in any of the previous claims characterised in that said fastening means (7) comprise at least a slot (22) obtained in the support structure (2) and elongated according to a substantially horizontal direction of development and at least a locking member (23) inserted through said slot (22) and able to be hitched in use onto said sliding bearing or to said sleeper.

14. A sliding device for railway switches as claimed in claim 13 characterised in that said locking member (23) comprises a locking screw which can be screwed onto said bearing or said sleeper.

15. A sliding device for railway switches as claimed in claim 13 characterised in that said locking member (23) comprises at least a tightening screw (26) inserted through said slot (22), a first engagement element (27) having a nut screw (29) for receiving said tightening screw (26), and a second engagement element (28), the first and the second engagement element (27), (28), being able to be inserted into a cavity present on said sliding bearing and having respective inclined surfaces (30), relative to said tightening screw (26), coupled so the mutually slide one over the other, the screwing of the tightening screw (26) causing the motion of the two engagement elements (27), (28) within the cavity by mutual sliding along the respective inclined surfaces (30), between a first configuration of minimum bulk, in which they can be inserted without interference inside said cavity, and a second configuration of maximum bulk, in which they act in sealed fashion within said cavity by means of two corresponding gripping surfaces (31).

16. A sliding device for railway switches as claimed in claim 15 characterised in that it comprises two of slots (22), each associated to each lateral flank (4), and two of said locking members (23) able to be inserted in two cavities obtained laterally on said bearing.